

What Is Claimed Is:

1. A method for detecting a signal comprising:
  - measuring the signal at a predefined sampling rate to provide measured values;
  - storing the measured values in a buffer memory; and
  - forming a median value of the stored measured values in a time-slot pattern slower than the sampling rate to obtain an averaged signal value.
2. The method according to claim 1, further comprising phase compensating the averaged signal value.
3. The method according to claim 2, wherein the phase compensation includes a compensation algorithm of the form:
 
$$y(k)=x(k)+\frac{1}{2}[x(k)-x(k-1)],$$
 x(k) being a battery voltage value at an instant k averaged by forming a median, x(k-1) being a battery voltage value at an instant k-1 averaged by forming a median, and y(k) being a compensated averaged battery voltage value at the instant k.
4. The method according to claim 1, wherein the signal is a voltage.
5. The method according to claim 1, wherein the signal is a battery voltage.
6. A device for detecting a signal comprising:
  - means for measuring the signal of a predefined sampling rate to provide measured signal values;
  - means for storing the measured signal values; and
  - means for forming a median value of the stored measured signal values in a time-slot pattern slower than the sampling rate to obtain an averaged signal value.
7. The device according to claim 6, wherein the means for storing includes a

ring memory.

8. The device according to claim 6, wherein the signal is a voltage.
9. The device according to claim 6, wherein the signal is a battery voltage.

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